SUPPACHAI SATTAYANURAK

114/2, Village No. 4, Khaoroopchang Sub-district,
Muang District, Songkhla, Thailand 90000
Tel: +66-99-145-4965 E-mail: chai_rubber@hotmail.com

PERSONAL INFORMATION

Sex: Male
Age: 39
Date of birth: 21st June 1984
Place of birth: Songkhla, Thailand
Marital status: Married
Nationality: Thai

EDUCATION

- **University of Twente** — Enschede, the Netherlands
  Degree of Doctor (Elastomer Technology and Engineering) — 2020
- Prince of Songkla University, Pattani campus — Pattani, Thailand
  Doctor of Philosophy (Polymer Technology) — 2020
  Thesis topic: Silica reinforced natural rubber: Shifting tire performance by hybridization with secondary fillers and polymers
  This project is supported by Apollo Tyres Global R&D, Enschede, the Netherlands.

- **Chulalongkorn University** — Bangkok, Thailand
  Master Degree of Science (Petrochemistry and Polymer Science) — 2012
  Thesis topic: Properties of styrene butadiene rubber compounded with devulcanized waste spew rubber from tire manufacturing

- **Prince of Songkla University, Pattani campus** — Pattani, Thailand
  Bachelor Degree of Science (Rubber Technology) — 2007
  Senior project: Preparation of thermoplastic polyolefins based on natural rubber and polypropylene blends

EXPERIENCE

- **Thaksin University, Faculty of Engineering** Phatthalung, Thailand
  Lecturer at Rubber and Polymer Engineering Program September 2021 – Current
  Responsibilities:
  1). Planning teaching, including lectures, seminars/tutorials and learning materials
  2). Checking and assessing students' work
  3). Writing research proposals, papers and other publications
  4). Supervising students

- **National Science and Technology Development Agency (NSTDA)** Pathumthani, Thailand
  National Metal and Materials Technology Center (MTEC) November 2020 – September 2021
  Researcher at Innovative Rubber Manufacturing Research Group (IR)
  Tire and Eco Rubber Compounding Research Team (TECT)
  Responsibilities:
  1). Managing research and development in rubbers and polymers
  2). Preparing research proposal

- **Bridgestone Asia Pacific Technical Center. Co., Ltd.** Bangkok, Thailand
  Senior Staff of Product and Process Development of tires July 2013 – December 2015
  Responsibilities:
  1). Development of expansion plans and introduction of new products
  2). Arrangement and optimization of specifications for each plant
  3). New Product and Technology Implementation

- **Thai Bridgestone. Co., Ltd. (Nong Khae Plant)** Saraburi, Thailand
  Senior Staff of Compounding May 2008 – June 2013
  Responsibilities:
  1). Identify new sources of rubber
  2). Develop new compound formulations
  3). Calculate the cost impact of approved new materials and new compounds
  4). Approve new mixers after installation
  5). Solve mixing problems in the compounding section
  6). Improve the quality and productivity for the compounding section
  7). Prepare the compound process and mixing process for trial and mass production
  8). Participate in natural rubber, synthetic rubber and rubber chemical supplier audits

- **RPS (Rubber Plastic and Steel) Technologies. Co., Ltd.** Pathumthani, Thailand
  Product Launch Engineer September 2007 – April 2008
  Responsibilities:
  1). Test of new product models and follow up problems in mass production
  2). Define the product processes for the production department

SKILL

- **Computer skills:** Microsoft Excel, Microsoft Word, Microsoft Power Point, Microsoft Outlook, and Internet Explorer
- **Language skills:** Thai: mother tongue, English: fluent, Dutch: Basic knowledge: Japanese: Basic knowledge

PUBLICATION

- **S. Sattayanurak**, J.W.M. Noordermeer, K. Sahakaro, W. Kaewsakul, W.K. Dierkes, and A. Blume. (2019). Silica-reinforced natural rubber: synergistic effects by addition of small amounts of secondary fillers to silica-reinforced natural rubber tire tread compounds. Advances in Materials Science and Engineering, Article ID 5891051. pp. 1-8. https://doi.org/10.1155/2019/5891051 (Published)
- **S. Sattayanurak**, K. Sahakaro, W. Kaewsakul, W.K. Dierkes, L.A.E.M. Reuvekamp, A. Blume, and J.W.M. Noordermeer. (2020). Synergistic effect by high specific surface area carbon black as secondary filler in silica reinforced natural rubber tire tread compounds. Polymer Testing, 81. pp. 1-10. https://doi.org/10.1016/j.polymertesting.2019.106173 (Published)
- **S. Sattayanurak**, K. Sahakaro, W. Kaewsakul, W.K. Dierkes, L.A.E.M. Reuvekamp, A. Blume, and J.W.M. Noordermeer. (2020). Improvement of silica-reinforced natural rubber tire tread compounds by joint hybridization with small amounts of secondary fillers and polymers. Rubber Chemistry and Technology, 93. pp. 652-671. https://doi.org/10.5254/rct.20.79962 (Published)
- **S. Sattayanurak**, K. Sahakaro, W. Kaewsakul, W.K. Dierkes, L.A.E.M. Reuvekamp, A. Blume, and J.W.M. Noordermeer. (2021). Enhancing performance of silica-reinforced natural rubber tire tread compounds by applying organoclay as secondary filler. Rubber Chemistry and Technology, 94. pp. 121-144. https://doi.org/10.5254/rct.20.80373 (Published)
- **S. Sattayanurak**, K. Sahakaro, W. Kaewsakul, W.K. Dierkes, L.A.E.M. Reuvekamp, A. Blume, and J.W.M. Noordermeer, (2021). Elucidating the role of clay-modifier on the properties of silica-and silica/nanoclay-reinforced natural rubber tire compounds. Express Polymer Letters, 15. pp. 666-684. https://doi.org/10.3144/expresspolymlett.2021.56 (Published)

REFERENCE

- **Professor Dr. Jacques W.M. Noordermeer**, Department of Elastomer Technology and Engineering, Faculty of Engineering Technology, University of Twente, the Netherlands, Tel: +31-53-489-2529
- **Professor Dr. Anke Blume**, Department of Elastomer Technology and Engineering, Faculty of Engineering Technology, University of Twente, the Netherlands, Tel: +31-53-489-3217
- **Associate professor Dr. Kannika Sahakaro**, Department of Rubber and Polymer Technology, Faculty of Science and Technology, Prince of Songkla University, Pattani Campus, Pattani, Thailand, Tel: +66-73-312-213
- **Professor Dr. Suda Kiatkamjornwong**, Department of Imaging and Printing Technology, Faculty of Science, Chulalongkorn University, Bangkok, Thailand, Tel: +66-86-885-1995